

# Vermont

## Radiological Emergency Response Plan (RERP) 2016

Nuclear Decommissioning Citizen Advisory Panel  
Brattleboro Union High School  
Thursday, September 22, 2016



# Agenda

- Situation
- Plan Changes
- Current Plan
- Discussion/ Questions?

# Situation

Vermont Yankee (VY)  
Radiation Risk to Public  
Preparedness Resources



## Vermont Yankee (VY)

- Reactor shut down December 29, 2014
- All fuel moved from reactor to spent fuel pool in January, 2015
- Remaining release hazards:
  - Industrial Accident
  - Hostile Action
- Remaining Emergency Alert Levels (EALs):
  - Unusual Events
  - Alerts
- Planning for fuel in spent fuel pool to be in casks by 2020

# Radiation Risk to Public

- Average American receives background radiation dose of 0.62 rem/year
- EPA Protective Action Guides (PAGs) for radiological incidents
- <1 rem TEDE - No planned protective action. State may issue an advisory to seek shelter and await further instructions. Monitor environmental radiation levels.
- $\geq 1$  rem TEDE - Conduct evacuation ... of populations in the predetermined area. Monitor environmental radiation levels and adjust area for evacuation or sheltering based on these levels. Control access.
- <0.5 rem/year - People previously evacuated ... may return to occupy their residences.

## Health Impacts

- Dose between 5 and 10 rem usually results in no acute health effects, but it does slightly increase the risk of getting cancer in the future.
- Radiation dose above 70 rem delivered externally to the whole body in a short period of time (typically a few minutes) will result in observable health effects to the individual exposed. The larger the amount of dose received in a short period of time the lower the survival rate.

TEDE - Total Effective Dose Equivalent



# Preparedness Resources

- Funding

- Emergency Management: \$300K/year budget agreement (for FY17 and FY18)
  - Local (Former EPZ) town funding agreements forthcoming
    - Scope of Work is being developed but will entail similar elements to RERP Grants: Training, exercises, and equipment
- Health and other functions: bill-back for expenses

- Staff

- DEMHS maintains responsibility for coordinating emergency planning and response
- DEMHS will have one person in Brattleboro whose responsibilities will include RERP
  - **Two new DEMHS Regional positions posted**

- Equipment

- Dosimeters and survey meters are consolidated at the state level



# Plan Changes

Plan Change Highlights



# Plan Change Highlights

Requirements	FY16 (Transition)	FY17 until Spent Fuel Pool empty
Emergency Planning Zone (EPZ)	Brattleboro, Dummerston, Guilford, Halifax, Marlboro, Vernon	VY site boundary within Vernon
Reception Center (RC) and Mass Care	RC resourced and trained to process 20% of EPZ population; congregate care facilities identified in plans	No RC; congregate care facilities will receive evacuees as necessary
Radiological Survey Teams	Team members identified, focused on VY response	Requirements identified, planned for statewide response
State and EPZ Drills and exercises	Monthly radio checks Quarterly drills or planning workshops	Biennial planning workshop Biennial tabletop exercise
Training	Initial and annual refresher for EPZ responders	Available as requested
Equipment	Dosimetry and survey meters distributed to towns and response organizations; funding for local EOC maintenance	Dosimetry and survey meters consolidated for distribution; limited funding for towns
Potassium Iodide (KI)	KI for residents and emergency workers	Not needed, keep KI until expiration if desired

<http://bit.ly/2d42NoK>

*Bottom line: plans and equipment remain in place, but assignment of roles and resources is less detailed and training and exercising will be less frequent*

# Current Plan

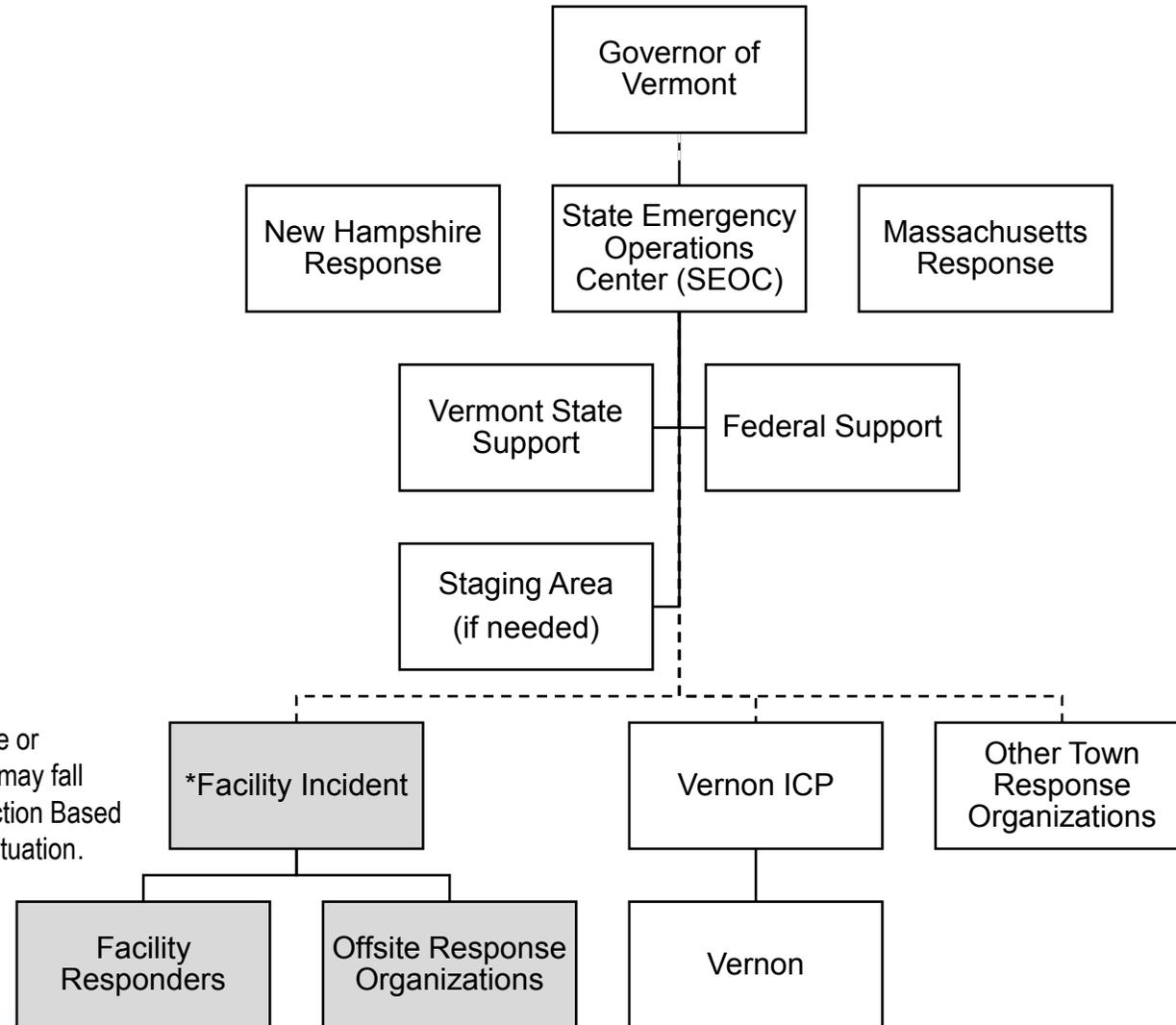
Preparedness  
Response Structure  
Response Actions

# Preparedness

- Planning
  - State and Town plans revised in early 2016
- Training
  - Radiological emergency response training is available to state and local response personnel
- Exercises
  - Biennial workshop
  - Biennial tabletop exercise



# Response Structure



\* The facility incident organization may be site-internal for a technical issue or accident, commanded from the VY control room or YR admin building, or may fall under a Law Enforcement (LE) unified command structure for a Hostile Action Based (HAB) incident with an Incident Command Post (ICP) appropriate to the situation.

# Protective and Precautionary Action Summary

Classification	Protective/Precautionary Action	Public Notification
Unusual Event	None	None
Alert	Early assembly of buses State of Emergency Transfer Vernon schoolchildren Vernon shelter-in-place	Press Release VT-Alert
Escalation Beyond Alert	State of Emergency Precautionary transfer of schoolchildren Shelter livestock Clear parks and waterways Advise transients to leave Implement traffic and access control Shelter-in-place Evacuate	Emergency Alert System (EAS) VT-Alert Sirens Route Alerting
<i>These are possible actions - the current and projected situation will dictate what the state recommends and what actions towns implement.</i>		

VT-Alert = Vermont Rapid Emergency Notification Telephone System (RENTS)

Discussion/ Questions?



Thank you!

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